

Date: Wednesday, 11/03/2009 7:17:05 AM
User: Linda Lacelle

Process Sheet

Split

Customer	: CU-DAR001 Dart Helicopters Services	Drawing Name	: ARM
Job Number	: 46403 -1		
Estimate Number	: 12884		
P.O. Number	:	Part Number	: D3560044
This Issue	: 11/03/2009 S.O. No. :	Drawing Number	: D3560 REV D
Prsht Rev.	: NC	Project Number	: N/A
First Issue	: / / Type : MACHINED PARTS	Drawing Revision	: D
Previous Run	: 44474	Material	:
Written By	:	Due Date	: 18/03/2009
Checked & Approved By	:	Qty:	<i>2</i> Um: Each
Comment	: Est Rev:A New Issue 07.05.24 EC Est Rev B ECN 987 07.10.09 EC verified by DD Est Rev:C ECN1048 07-12-18 DD verified by: EC		

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	M6061T6B0500X05000	6061-T6 Bar .500 x 5.00
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Comment: Qty.: 1.3598 f(s)/Unit Total: 13.5975 f(s)
6061-T6 Bar 0.50" x 5.00"
Batch: _____

M110167 x 8'
M110550 x 4.6'
M1108586 x 16"

mmf

2.0	BAND SAW	BAND SAW
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Comment: BAND SAW
Cut blanks 15.500" long

mmf

3.0	HAAS1	HAAS CNC VERTICAL MACHINING #1
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Comment: HAAS CNC VERTICAL MACHINING #1

1- Mill as per Folio FA696 Rev: *AA* & Dwg D3560 Rev: *D*
2-C'sink 0.196" hole on manual mill as per dwg D3560
3-Deburr per dwg D3560

mmf 09/03/15

(PB) →

(8)

4.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE
-----	-----	--



Comment: INSPECT PARTS AS THEY COME OFF MACHINE

mmf 09/03/15

(8)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D3560-044 PAR #: _____ Fault Category: _____ NCR: Yes ☒ No ☐ DQA: P Date: 08/04/15
 Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR: <u>46403</u>		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
<u>9/3/16</u>	<u>3.0</u>	<u>4 parts have 0.250" bore</u> <u>0.507" 0.200" too deep at 0.</u> <u>2 parts are at 0.261" deep</u> <u>2 parts are at 0.275" deep</u> <u>E.C.</u>	<u>CP</u> <u>09.03.16</u> <u>per</u> <u>081042</u>	<u>0.261" DEEP ACCEPTABLE</u> <u>0.275" SCRAP Qty x 2</u> <u>no replace</u>	<u>nmw</u> <u>09/03/16</u>	<u>nmf</u> <u>09/03/16</u>	<u>CP</u> <u>09.03.16</u> <u>per</u> <u>081042</u>	<u>S</u> <u>09/03/16</u>

NOTE: Date & initial all entries

Date: Wednesday, 11/03/2009 7:17:05 AM
User: Linda Lacelle

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: ARM

Job Number: 46403

Part Number: D3560044

Job Number:



Seq. #:	Machine Or Operation:	Description :
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5.0	QC8	SECOND CHECK
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Comment: SECOND CHECK

inf 09/03/18

(8)

6.0	D35921	Plate
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Comment: Qty.: 1.0000 Each(s)/Unit Total: 10.0000 Each(s)
PLATE *3 44666*

09-03-18 2

7.0	LARGE FAB 1	LARGE FABRICATION RESOURCE 1
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Comment: LARGE FABRICATION RESOURCE 1

1-Weld assembly as per dwg D3560

STEP:

- 1- clean material (buff bracket and bottom of arm with blue pad) *th*
- 2- set up bracket and arm on jig *th*
- 3- preheat bracket and arm with torch *th*
- 4- clean before welding with brush *th*
- 5- set up machine to 135 amps *th*
- 6- weld across bottom and top ends *th*
- 7- reheat with torch (65 deg C) *th*
- 8- on one side weld from bottom to top half way *th*
- 9- same for other side (half way) *th*
- 10- from half way point weld the rest of the first side (ease off pedal near end) *th*
- 11- same for remaining side (ease off pedal near end) *th*

09-03-18 2

8.0	QC5	INSPECT WORK TO CURRENT STEP
-----	-----	------------------------------



Comment: INSPECT WORK TO CURRENT STEP

09/03/18 (42)

9.0	QC9	VISUAL WELDING INSPECTION
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Comment: VISUAL WELDING INSPECTION

PD 09-03-18 (2)

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Wednesday, 11/03/2009 7:17:06 AM
User: Linda Lacelle

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: ARM

Job Number: 46403

Part Number: D3560044

Job Number:



Seq. #:

Machine Or Operation:

Description :

10.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1

Handwritten: 09-03-18 2

11.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

Handwritten: 09/03/18 (x2)

12.0

D2808

Bushing



Comment: Qty.: 1.0000 Each(s)/Unit Total: 10.0000 Each(s)

Spacer

batch:

Handwritten: 342181

Handwritten: 09/03/18

13.0

SMALL FAB 1

SMALL & MEDIUM FAB RESOURCE 1



Comment: SMALL & MEDIUM FAB RESOURCE 1

1-Press bushing in D3560 arm per dwg D3562

Handwritten: 09/03/18 (2)

14.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

Handwritten: 09/03-18 (2)
Handwritten: Ser B.I.D.

15.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location:

Handwritten: WA

Handwritten: 09-03-18 2

16.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

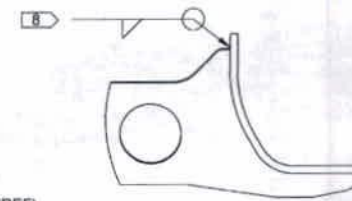
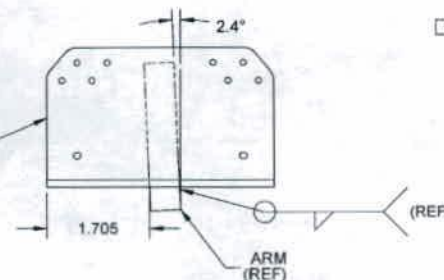
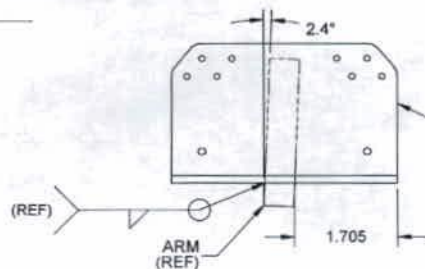
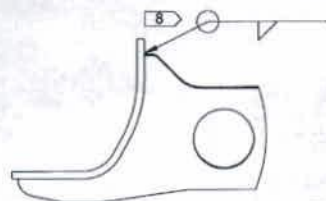
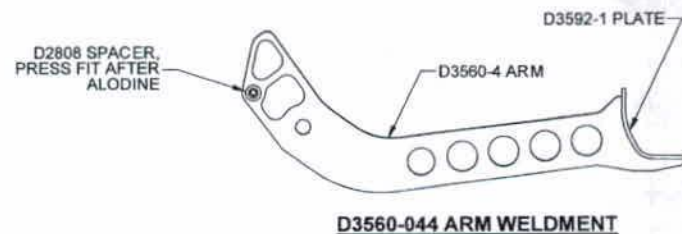
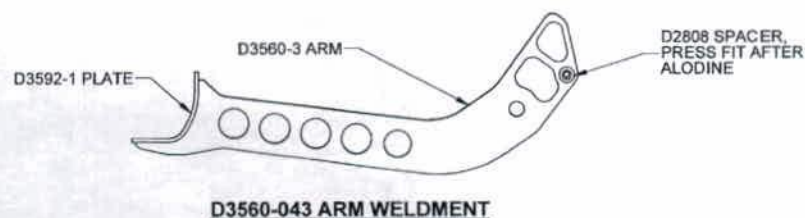
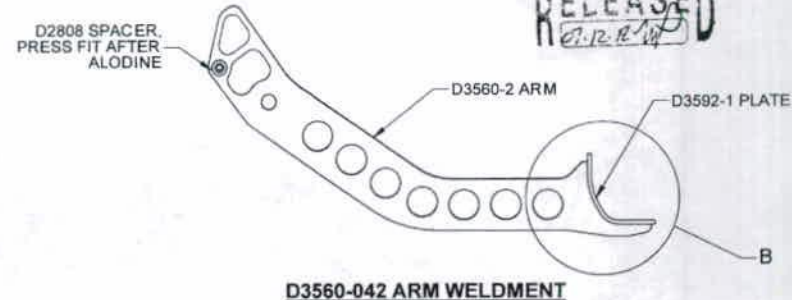
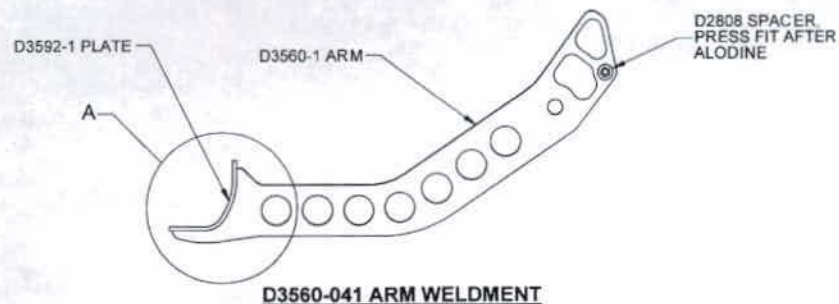
Handwritten: 09/03/18

Job Completion



Handwritten: mf
09-03-18

RELEASED
0.12.2.14



PARTS LIST

QTY -041	QTY -042	QTY -043	QTY -044	P/N	DESCRIPTION
X				D3560-041	ARM WELDMENT
	X			D3560-042	ARM WELDMENT
		X		D3560-043	ARM WELDMENT
			X	D3560-044	ARM WELDMENT
1	1	1	1	D2808	SPACER
1				D3560-1	ARM
	1			D3560-2	ARM
		1		D3560-3	ARM
			1	D3560-4	ARM
1	1	1	1	D3592-1	PLATE

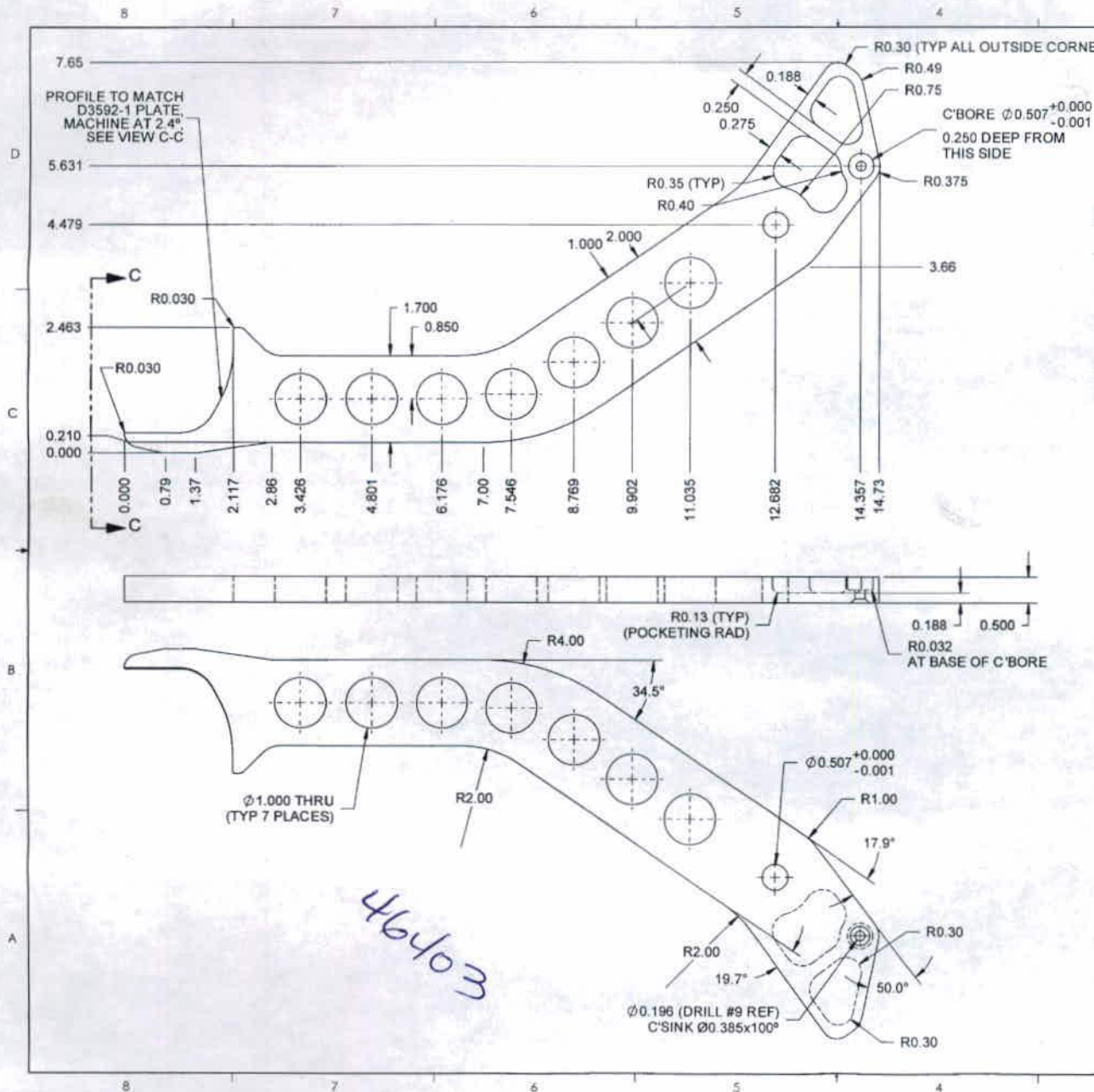
- NOTES:
- 1) MATERIAL: N/A
 - 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.015 MAX
 - 6) IDENTIFICATION: N/A
 - 7) WEIGHT: 1.23 lbs (TYP)
 - 8) WELDING: PER DART QSI 004

D	ADD D2808 PRESS FIT NOTE; REDRAWN IN SOLIDWORKS	DC	07.11.16
C	REMOVE POWDER COAT	CP	07.06.19
B	REDESIGN AS WELDMENT, ADD POCKETS	CP	07.01.15
A	NEW ISSUE	CP	06.09.25
REV	DESCRIPTION	BY	DATE
DESIGN			
DRAWN			
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	07.11.16		

DART AEROSPACE LTD
HAWKESBURY, ONTARIO, CANADA

DRAWING NO. D3560
TITLE ARM WELDMENT
REV. D
SHEET 1 OF 5
SCALE 1:4

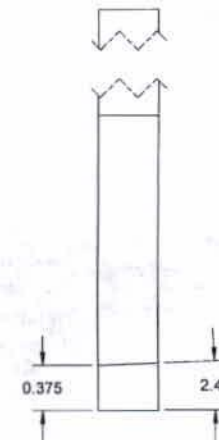
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D3560-1 ARM WELDMENT

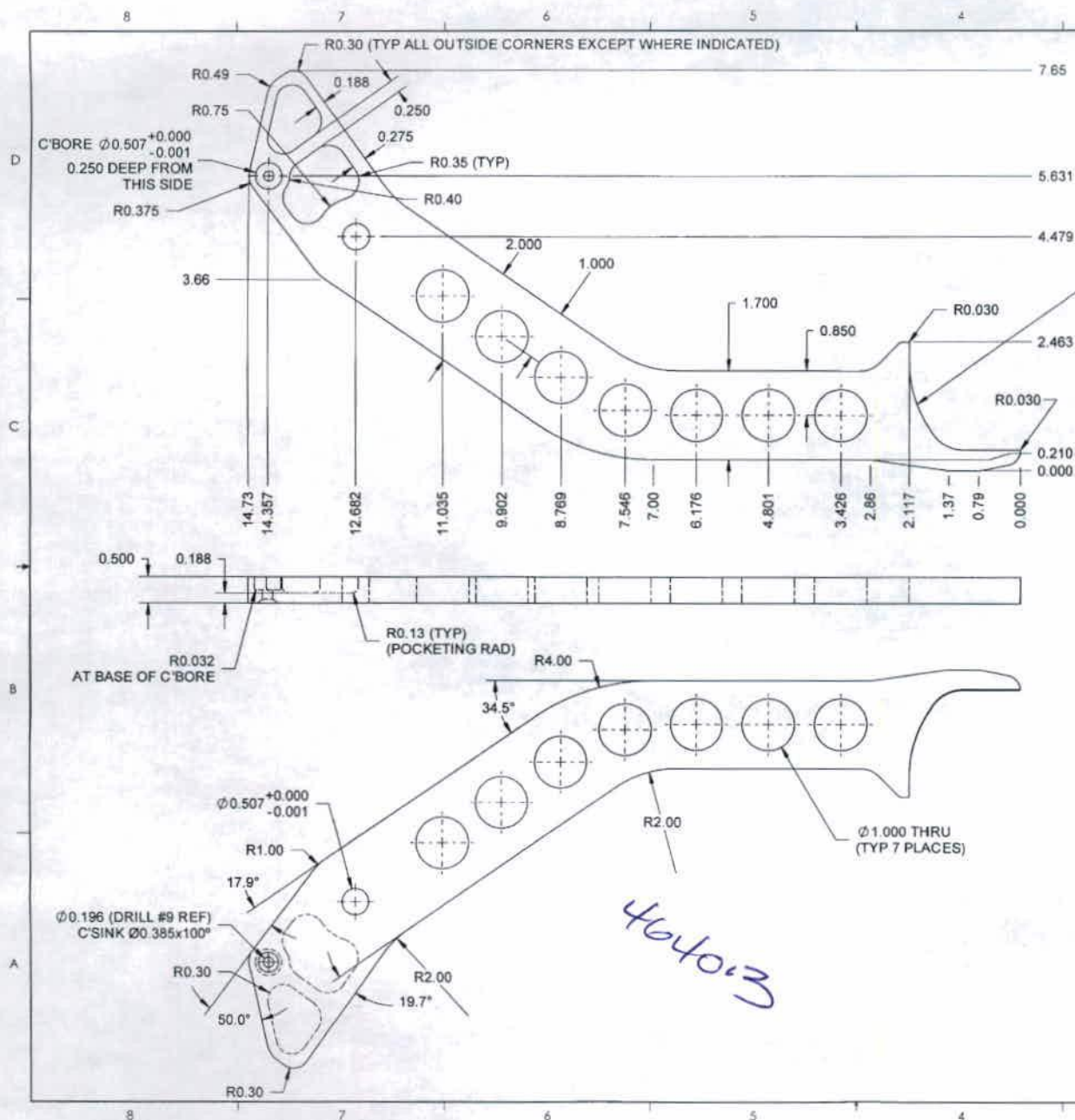
NOTES:

- 1) MATERIAL: 6061-T6 (OR 6061-T651/T6510/T6511/T62) BAR, 0.500 THICK
PER AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116) OR
PER AMS-QQ-A-200/8 (OR AMS 4160)
(REF. DART SPEC. M6061T6B0.500)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.015 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 1.05 lbs



RELEASED
07.12.16

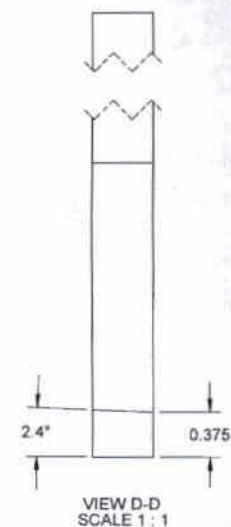
DESIGN	JP	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	JC		
CHECKED	JS	DRAWING NO. D3560	REV. D
MFG. APPR.	JS	SHEET 2 OF 5	
APPROVED	JS	TITLE ARM WELDMENT	SCALE 1:2
DE APPR.	JS	COPYRIGHT © 2006 BY DART AEROSPACE LTD	
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PROFILE TO MATCH
D3592-1 PLATE,
MACHINE AT 2.4°,
SEE VIEW D-D

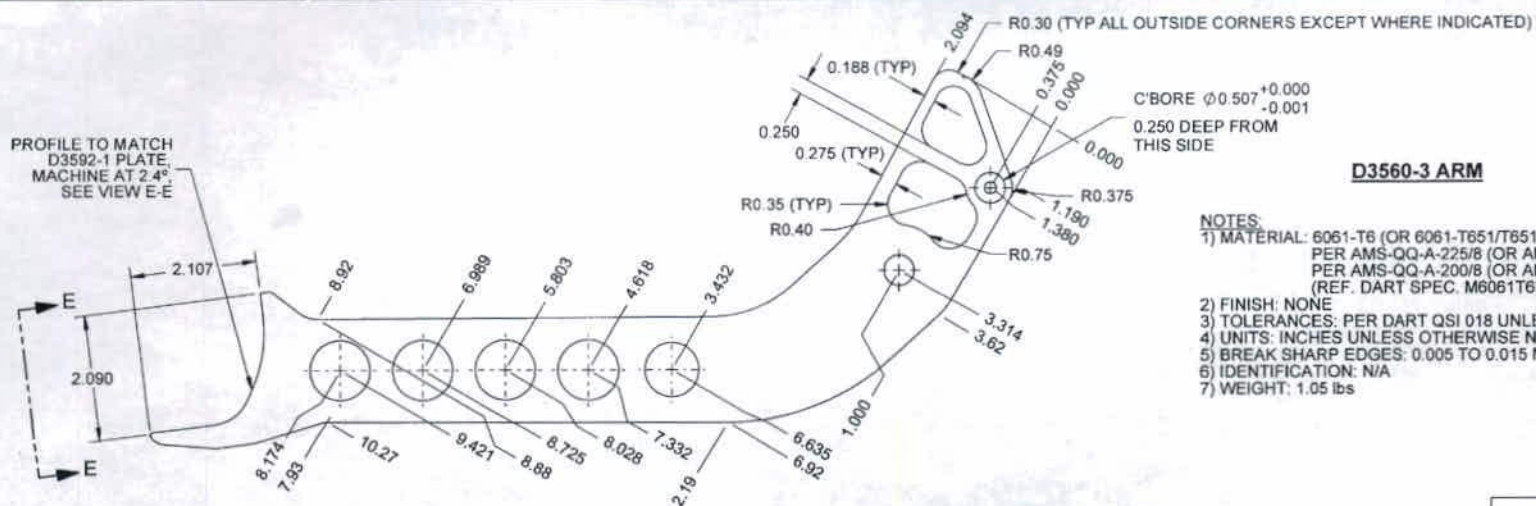
D3560-2 ARM

- NOTES:
1) MATERIAL: 6061-T6 (OR 6061-T651/T6510/T6511/T62) BAR, 0.500 THICK
PER AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116) OR
PER AMS-QQ-A-200/8 (OR AMS 4160)
(REF. DART SPEC. M6061T6B0.500)
2) FINISH: NONE
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.015 MAX
6) IDENTIFICATION: N/A
7) WEIGHT: 1.05 lbs



DESIGN	<i>g</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA DRAWING NO. D3560 TITLE ARM WELDMENT COPYRIGHT © 2008 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL, AND IS SUPPLIED ON THE EXPRESS UNDERSTANDING THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COMMUNICATED TO ANY OTHER PERSON WITHOUT THE WRITTEN PERMISSION OF DART AEROSPACE LTD.	REV. D
DRAWN	<i>gc</i>		SHEET 3 OF 3
CHECKED	<i>g</i>		SCALE
MFG. APPR.	<i>g</i>		
APPROVED	<i>g</i>		
DE APPR.	<i>g</i>		
DATE	07.11.16		

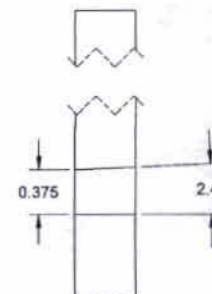
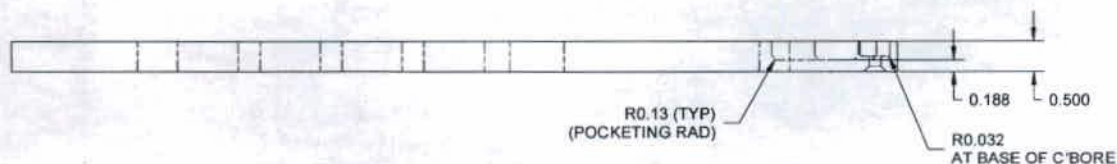
PROFILE TO MATCH
D3592-1 PLATE
MACHINE AT 2.4°
SEE VIEW E-E



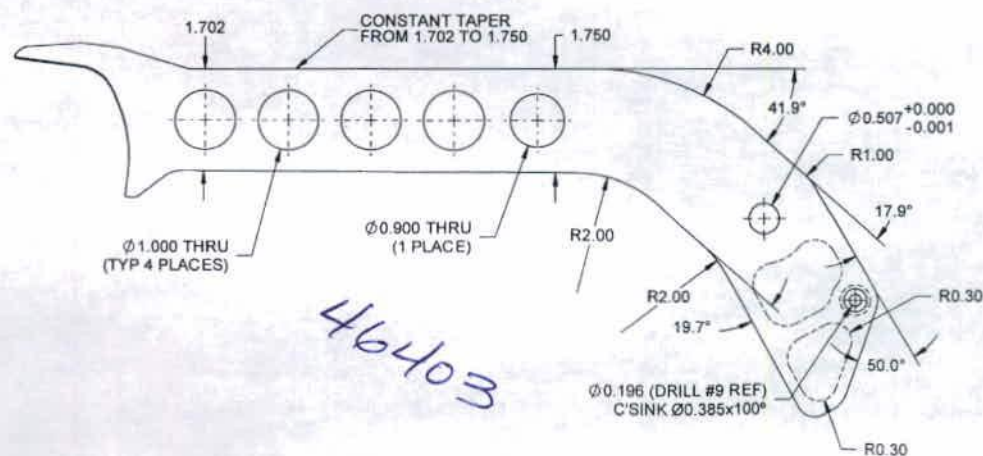
D3560-3 ARM

NOTES:

- 1) MATERIAL: 6061-T6 (OR 6061-T651/T6510/T6511/T62) BAR, 0.500 THICK
PER AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116) OR
PER AMS-QQ-A-200/8 (OR AMS 4160)
(REF. DART SPEC. M6061T6B0.500)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.015 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 1.05 lbs



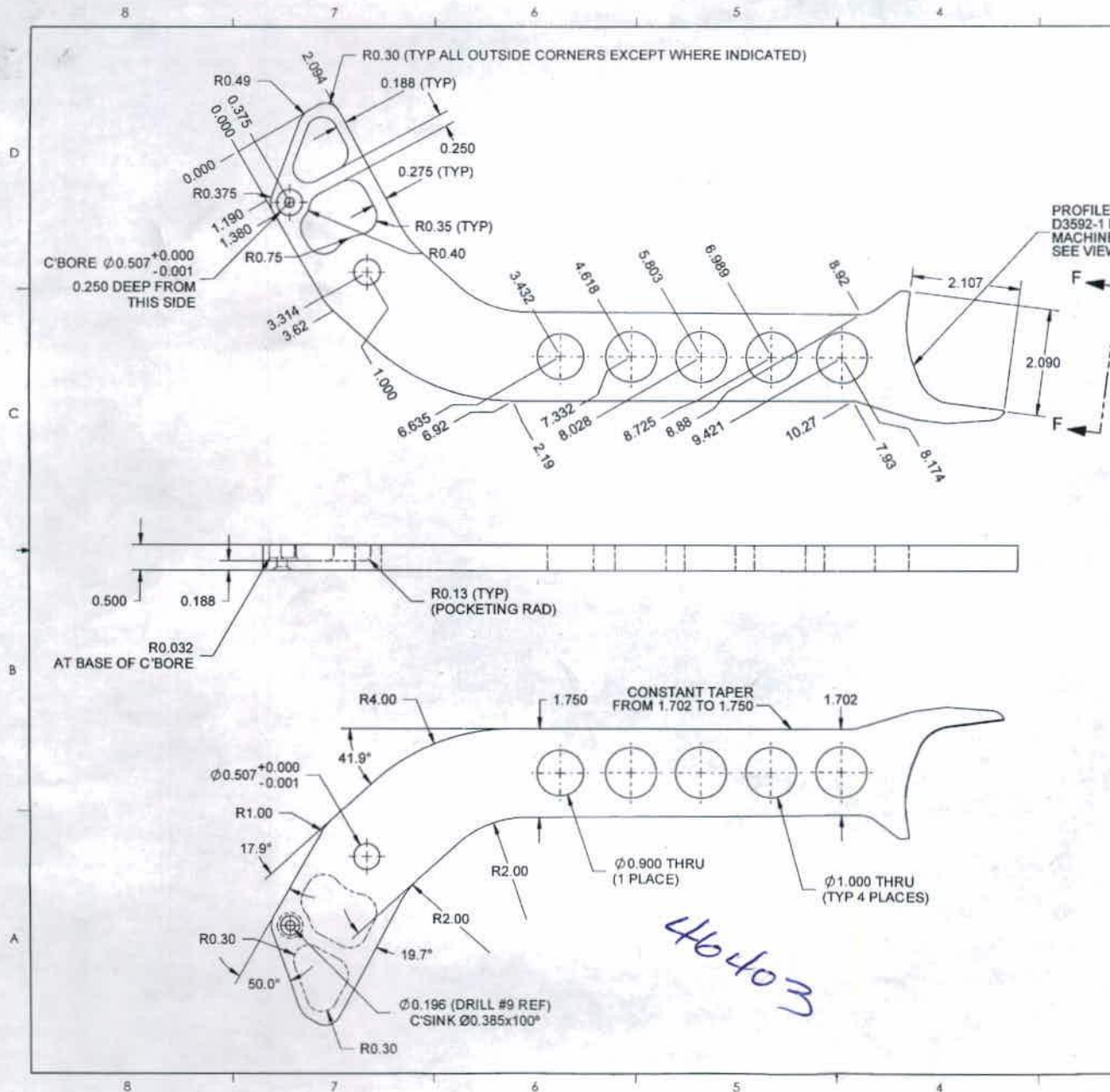
VIEW E-E
SCALE 1:1



46403

DESIGN	46403	DART AEROSPACE LTD	
DRAWN	46403	HAWKESBURY, ONTARIO, CANADA	
CHECKED	46403	DRAWING NO.	REV. D
MFG. APPR.	46403	D3560	SHEET 4 OF 5
APPROVED	46403	TITLE	SCALE
DE APPR.	46403	ARM WELDMENT	1:2
DATE	07.11.16	COPYRIGHT © 2006 BY DART AEROSPACE LTD	

RELEASED
07.12.14



D3560-4 ARM

NOTES:

- 1) MATERIAL: 6061-T6 (OR 6061-T651/T6510/T6511/T62) BAR, 0.500 THICK PER AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116) OR PER AMS-QQ-A-200/8 (OR AMS 4160) (REF. DART SPEC. M6061T6B0.500)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.015 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 1.05 lbs

DESIGN		DART AEROSPACE LTD	
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CHECKED		DRAWING NO.	REV. D
MFG. APPR.		D3560	SHEET 5 OF 5
APPROVED		TITLE	SCALE
DE APPR.		ARM WELDMENT	1:2
DATE	07.11.16	COPYRIGHT © 2008 BY DART AEROSPACE LTD	